Roline Virtual VNC Console
14.01.3370
User Manual

RoHS

This product is RoHS compliant.

User Information

All information, documentation, and specifications contained in this manual are subject to change without prior notification by the manufacturer. The manufacturer makes no representations or warranties, either expressed or implied, with respect to the contents hereof and specifically disclaims any warranties as to merchantability or fitness for any particular purpose. Any of the manufacturer's software described in this manual is sold or licensed *as is*. Should the programs prove defective following their purchase, the buyer (and not the manufacturer, its distributor, or its dealer), assumes the entire cost of all necessary servicing, repair and any incidental or consequential damages resulting from any defect in the software.

The manufacturer of this system is not responsible for any radio and/or TV interference caused by unauthorized modifications to this device. It is the responsibility of the user to correct such interference.

The manufacturer is not responsible for any damage incurred in the operation of this system if the correct operational voltage setting was not selected prior to operation. PLEASE VERIFY THAT THE VOLTAGE SETTING IS CORRECT BEFORE USE.

CE

Package Contents

The 14.01.3370 package consists of:

1 14.01.3370 Virtual VNC Console

1 Wireless-G USB Adapter

1 Software and User Manual CD

1 Power Adapter

1 Rack Mount Kit

Check to make sure that all of the components are present and in good order. If anything is missing, or was damaged in shipping, contact your dealer.

Read this manual thoroughly and follow the installation and operation procedures carefully to prevent any damage to the 14.01.3370 or to any other devices on the installation.

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About This Manual

This User Manual is provided to help you get the most from your 14.01.3370 system. It covers all aspects of installation, configuration and operation. An overview of the information found in the manual is provided below.

Chapter 1, Introduction, introduces you to the 14.01.3370. It presents the 14.01.3370's purpose and features, and describes the components of the 14.01.3370's front and back panels.

Chapter 2, Hardware Setup, provides step-by-step instructions for installing the 14.01.3370.

Chapter 3, Basic Operation, explains how to configure and operate the 14.01.3370.

Chapter 4, KE8220VNC, explains how to install, configure, and operate KE8220VNC.

Chapter 5, Remote Computer Operation, explains how to connect, display and manage remote computers with the 14.01.3370.

An Appendix, at the end of the manual provides technical and troubleshooting information.

Conventions

This manual uses the following conventions:

`Monospaced`	Indicates text that you should key in.
[ ]	Indicates keys you should press. For example, [Enter] means to press the **Enter** key. If keys need to be chorded, they appear together in the same bracket with a plus sign between them: [Ctrl+Alt].
1.	Numbered lists represent procedures with sequential steps.
♦	Bullet lists provide information, but do not involve sequential steps.
→	Indicates selecting the option (on a menu or dialog box, for example), that comes next. For example, Start → Run means to open the *Start* menu, and then select *Run*.
	Indicates critical information.

Chapter 1
Introduction

Overview

The 14.01.3370 Virtual VNC Console is a thin-client device for managing remote computers running KE8220VNC. The 14.01.3370 and KE8220VNC employ a client-server model to transmit a remote computer's desktop environment over a network to the 14.01.3370. By connecting a keyboard, video, mouse (KVM) console to the 14.01.3370, you can access and manage up to 4 remote computers at a time just as if you were sitting right in front of them.

The 14.01.3370 also is useful for meeting room environments where laptop computers abound. Presenters can connect to the 14.01.3370 to display their computers' desktops on the attached monitor or projector. This eliminates plugging and unplugging of video cables and hardware incompatibility issues, so presentations progress more quickly and smoothly.

The monitor, keyboard, and mouse connect to the 14.01.3370 via an HDB-15 port and 2 universal serial bus (USB) ports. Or, you can use a PS/2 to USB Adapter to connect a PS/2 keyboard and mouse.

The 14.01.3370 operates over standard TCP/IP connections, so you can use your existing network infrastructure. Or, install the included Wireless-G USB Adapter to connect to 802.11b/g wireless networks.

Finding, adding, and accessing remote computers is easy. The 14.01.3370 automatically searches the local network for remote computers running KE8220VNC. You also can manually add computers or scan a broader range of IP addresses and ports for remote computers running KE8220VNC. The 14.01.3370 stores connection information for up to 256 remote computers for quick and easy access.

User management is equally simple. You can add up to 64 user accounts and assign administration rights to users at anytime.

The 14.01.3370 includes rich multi-language features such as multiple display languages and support for keyboard layouts for several languages and regions.

Robust security is another feature of the 14.01.3370. Login password authentication and two-level user access control prevent unauthorized users from accessing the 14.01.3370 and making changes. Remote computers are password protected and passwords are encrypted in all network communications. On wireless networks, the 14.01.3370 supports up to 256-bit Wired Equivalent Privacy (WEP) and Wi-Fi Protected Access (WPA and WPA2) encryption to thwart eavesdropping.

Additional features include a kit to mount the 14.01.3370 to a ceiling, wall, or system rack, and free lifetime upgrades for both the 14.01.3370 firmware and KE8220VNC software.

Features

Features

- Supports high-quality video display resolutions up to SXGA (1280 x 1024) @ 60 Hz
- Supports VGA standby mode with password protection on resume
- User-friendly graphical on-screen display menus for easy configuration
- Supports two-level user access control (Administrator and User)
- Password protected for enhanced security
- Display 14.01.3370 and KE8220VNC user interface text in multiple languages
- Automatically discover 14.01.3370 and KE8220VNC within the same network
- KE8220VNC is compatible with Windows 2000/XP/2003/Vista
- Choose from among several keyboard layouts
- Supports 10/100Base-T (802.3/802.3u) Ethernet
- Supports 14.01.3370 operation over 802.11b/g wireless networks at speeds up to 54 Mbps
- Supports 64-bit, 128-bit, and 256-bit WEP and WPA/WPA2 encryption for enhanced wireless security
- Supports static and automatic (DHCP) network configuration
- Native support for USB keyboard and mouse
- Supports PS/2 keyboard and mouse with PS/2-to-USB adapter
- Mounts easily to ceilings, walls, tabletops, and system racks (0U)

Meeting Room Projection

- Enables wireless presentation without cable swapping
- Display computer's screen on projector via network without distance limitation
- Real-time display of presentations, images and applications
- Seamlessly switch focus between computers with a single mouse click
- Compatible with all projectors and display devices having standard VGA connectors
- Executable KE8220VNC software downloadable from the 14.01.3370 embedded web server – enables real time presentations
- No Access Point required – AD-HOC mode with DHCP server support enables a direct wireless connection between the 14.01.3370 and a laptop PC

Remote Access

- Control remote computers from a KVM console anywhere at any time
- “Picture in picture” display lets you control one remote computer while monitoring another
- Panel Array Mode allows you to monitor up to 4 remote computers simultaneously from a single console
- Passwords encrypted network communications
- Manage up to 256 remote computers and 64 user accounts from one screen
- Supports *Ctrl-Alt-Delete* when KE8220VNC is running as a service

Requirements

The following is a list of requirements for the 14.01.3370 installation.

14.01.3370 Virtual VNC Console

The following equipment is required for the 14.01.3370 Virtual VNC Console:

- An XGA, or SXGA monitor or projector
- USB keyboard and mouse; or, PS/2 keyboard and mouse (requires PS/2-to-USB adapter)

  The 14.01.3370 supports the following keyboard layouts:

  - English (United Kingdom)
  - English (United States)
  - French
  - German
  - Italian
  - Japanese
  - Korean
  - Spanish
  - Thai

Remote Computers

Remote computers must have the following:

- KE8220VNC software installed (installation or executable version)
- Connection to the network and a valid IP address

Cables

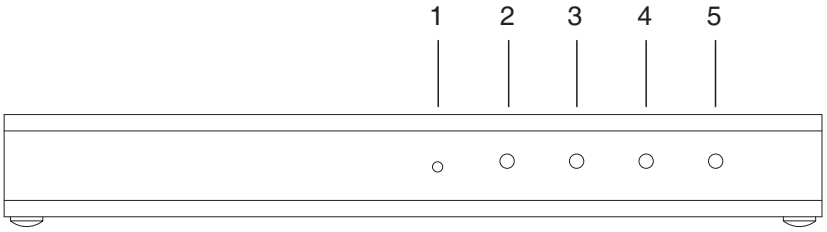
The 14.01.3370 requires 1 Cat 5 cable to connect to your Ethernet network.

Operating Systems

KE8220VNC is compatible with Microsoft Windows 2000 and higher.

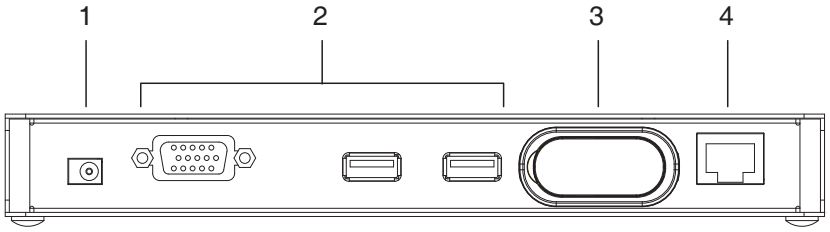
Components

14.01.3370 Front View



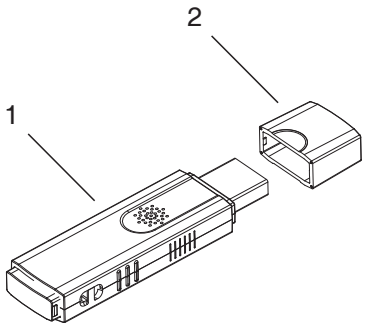
No.	Component	Description
1	RESET Button	Pressing in this button for 3 seconds and then releasing it performs a system reset. After the reset is completed you can login again. **Note**: This button is semi-recessed and must be pushed with a thin object — such as the end of a paper clip or a ballpoint pen.
2	WLAN LED	The 10/100 Mbps LED lights orange to indicate 11 Mbps data transmission speed. It lights green for 54 Mbps.
3	10/100 Mbps LED	The 10/100 Mbps LED lights orange to indicate 10 Mbps data transmission speed. It lights green for 100 Mbps.
4	LINK LED	When you connect to a remote computer, the green LINK LED illuminates, and it blinks during data transfer.
5	POWER LED	Lights (green) to indicate that the unit is receiving power and when it is in standby mode (orange).

14.01.3370 Rear View



No.	Component	Description
1	Power Jack	The plug from the AC power adapter connects here.
2	Console Ports	The external console's keyboard, monitor, and mouse cables plug in here.
3	WLAN Port	The Wireless-G USB Adapter that links the 14.01.3370 to a wireless network plugs in here.
4	LAN Port	The Cat 5 cable that links the 14.01.3370 to a network plugs in here.

Wireless-G USB Adapter



No.	Component	Description
1	USB Connector	Plugs into the WLAN Port on the 14.01.3370 rear panel.
2	Cap	Protects the USB connector when it is disconnected from the 14.01.3370.

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Chapter 2
Hardware Setup

1. Important safety information regarding the placement of this device is provided on page 63. Please review it before proceeding.
2. Ensure that all equipment to be connected is powered off.
3. Make sure that all devices you will be connecting up are properly grounded.

Desktop and Rack Mounting

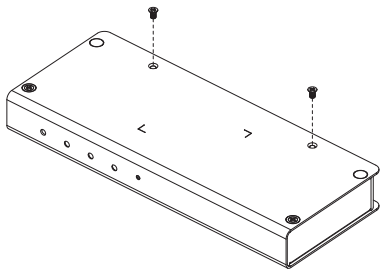
You can place the 14.01.3370 on the desktop, or mount it to a system rack, ceiling, or wall. The 14.01.3370 requires 0U of rack space.

Rack Mounting

A rack mount kit is included with the 14.01.3370 to mount it to a system rack, ceiling, or wall. The following steps show how to rack mount the 14.01.3370; however, you can follow this procedure to mount it to any flat surface.

To rack mount the 14.01.3370:

1. Using a Phillips head hex screwdriver, remove the screws (total 2) from the bottom of the 14.01.3370 (as shown in the figure below).



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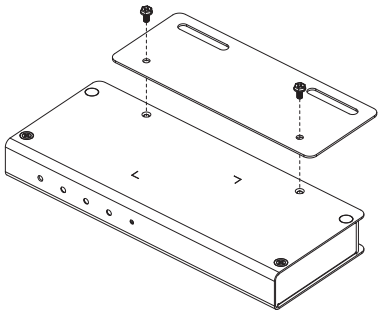
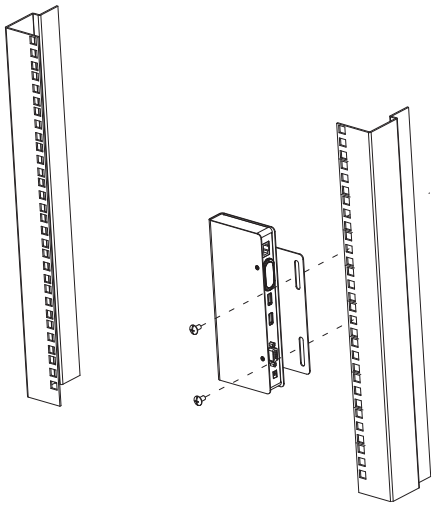
2. Using the screws provided with the rack mount kit, attach the mounting bracket to the bottom of the 14.01.3370 (as shown in the figure below).



3. Attach the unit to the rack. Rack screws and cage nuts are not provided with the 14.01.3370. Position the 14.01.3370 so that the holes in the mounting bracket line up with those in the rack. Secure the mounting bracket to the rack with rack screws and cage nuts suitable for your rack. Alternatively, you can use screws of appropriate diameter and length to mount the mounting bracket to a ceiling, wall, or desktop (mounting screws not provided).



Installing the 14.01.3370 Virtual VNC Console

You will need the following items to install the 14.01.3370 Virtual VNC Console:

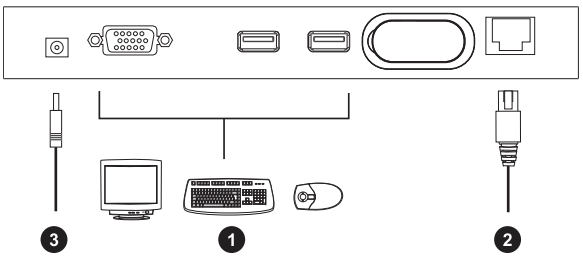
- 1 display device (monitor or projector)
- 1 keyboard
- 1 mouse
- 1 Cat 5 cable
- an Ethernet connection
- an AC power source rated for the 14.01.3370

To install the 14.01.3370 Virtual VNC Console:

1. Connect the display device, USB keyboard, and USB mouse cables to the console ports. The ports are marked with a monitor, keyboard, or mouse icon. Or, if you wish to use a PS/2 keyboard and mouse, see *Installing a PS/2 Keyboard and Mouse*, page 12.

   Note: If you are installing a wireless keyboard and mouse that share the same wireless receiver, and the receiver has a USB connector, connect it to the keyboard port on the back of the 14.01.3370. The port is marked with a keyboard icon.

2. Connect one end of a Cat 5 cable to your Ethernet network and the other end to the LAN port on the back of the 14.01.3370. Or, if you wish to use the 14.01.3370 on a wireless network, see *Installing the Wireless-G USB Adapter*, page 12.
3. Plug the power adapter into an appropriate AC power source, and then plug the power adapter cable into the power jack on the back of the 14.01.3370.



Installing a PS/2 Keyboard and Mouse

Install a PS/2-to-USB Adapter (see page 5) if you want to use a PS/2 keyboard and/or mouse. After installing the adapter, you can still use a USB mouse, but you will not be able to use a USB keyboard unless you first remove the adapter.

To install the PS/2 keyboard and mouse:

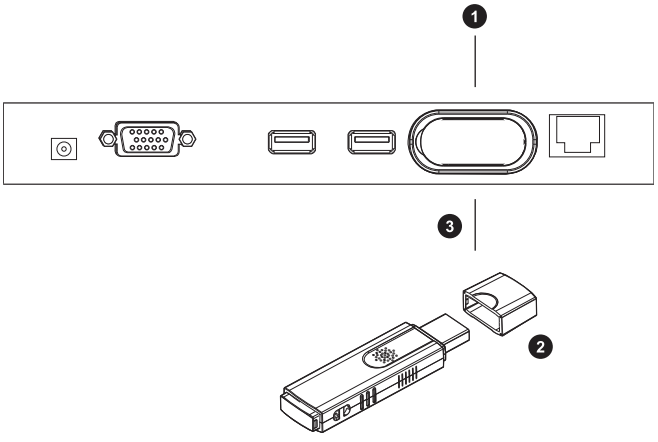
1. Connect the PS/2 keyboard and mouse cables to the keyboard and mouse ports on the adapter. The ports are color-coded and are marked with a keyboard or mouse icon.
2. Connect the adapter's USB cable to the keyboard port on the back of the 14.01.3370. The keyboard port is marked with a keyboard icon.

Installing the Wireless-G USB Adapter

Install the Wireless-G USB Adapter if you want to use the 14.01.3370 on a wireless network.

To install the Wireless-G USB Adapter:

1. Remove the cover from the 14.01.3370's WLAN port.
2. Remove the cap from the Wireless-G USB Adapter.
3. Using moderate pressure, insert the Wireless-G USB Adapter into the WLAN port. Ensure that the USB connector seats properly in the USB port.



Verifying the Connections

Ethernet

The *10/100 Mbps* LED indicator on the front panel of the 14.01.3370 illuminates when the 14.01.3370 establishes a valid connection to the Ethernet network. It indicates when you are communicating at the 10 Mbps rate (orange) and the 100 Mbps rate (green).

Wi-Fi

The *WLAN* LED indicator on the front panel of the 14.01.3370 illuminates when the 14.01.3370 connects to a wireless LAN. It indicates when you are communicating at the 11 Mbps rate (orange) and the 54 Mbps rate (green).

Power

The *Power* LED on the front panel of the 14.01.3370 illuminates when the 14.01.3370 is powered. It indicates when the 14.01.3370 is powered (green) and when it is in standby mode (orange).

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Chapter 3
Basic Operation

The 14.01.3370 Main Screen

When you connect a keyboard, mouse and monitor to the 14.01.3370, the Main Screen appears with the KE8220 logo. After connecting the 14.01.3370 to your network and configuring its network settings (see page 27), you can enter a new IP address into your computer's web browser to access the 14.01.3370's web page and download a copy of the KE8220VNC executable file to run on your computer.[1]

KE8220
You can push video from a remote computer to the KE8220. Or, to control remote computers via the KE8220, press any key or move the mouse, and then login to the KE8220.

Click anywhere on the Main Screen and the 14.01.3370 Login dialog box appears.

1. See p. 37 for a description of the different versions of KE8220VNC.

Logging In

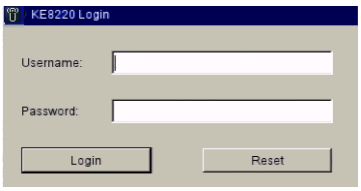
After you finish installing the 14.01.3370, you can log in to the graphical on-screen display (OSD). A default administrator account is provided to set up the initial working environment for the 14.01.3370.

The default administrator account username and password are:

Username: administrator[1]

Password: password

Enter a valid username and password, and click **Login**. (If you want to clear the username and password information, click **Reset**.)

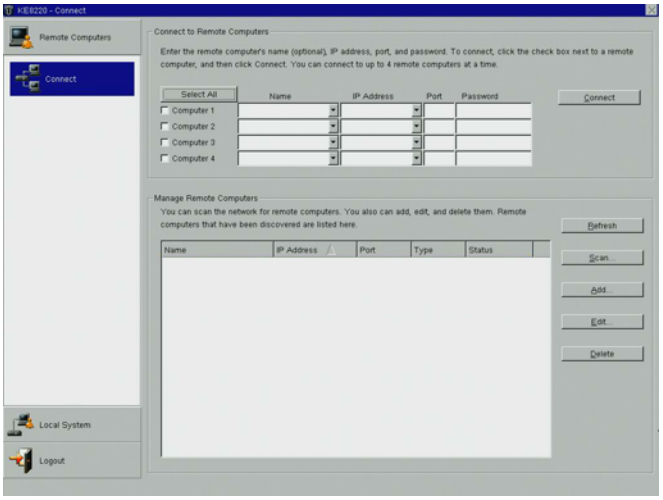


After you login, we suggest that you change the default administrator account password. Otherwise, unauthorized users may be able to access the 14.01.3370 through the default administrator account. (To change account passwords, see *Editing a User*, page 26.)

1. Usernames and passwords are case sensitive.

Graphical On-screen Display (OSD)

After logging into the 14.01.3370, the graphical OSD appears.



The OSD allows you to connect to remote computers, add users, and modify 14.01.3370 system settings. A menu bar is located on the left side of the OSD. Click on a menu button to display its related dialog boxes and options. Menus and dialog boxes are explained in the table below.

Menu	Dialog Box	Action
Remote Computers	Connect	Allows users to connect to remote computers and add, edit, and delete remote computers from the list. Users also can scan the network for remote computers.
Local System	Overview	Provides an overview of the 14.01.3370 settings.
	General	Sets the system name, display language, keyboard layout, resolution, hotkey, standby mode, and video push options.
	User Management	Allows administrators to manage users.
	LAN	Configures the TCP/IP settings for the 14.01.3370 on your Ethernet network.
	Wireless	Configures the 14.01.3370 for deployment on a WLAN.
	Date / Time	Allows administrators to set up the 14.01.3370's time parameters.
	System Log	Allows administrators to view the 14.01.3370's log.
Logout		Logs users out of the 14.01.3370.

Connecting to Remote Computers

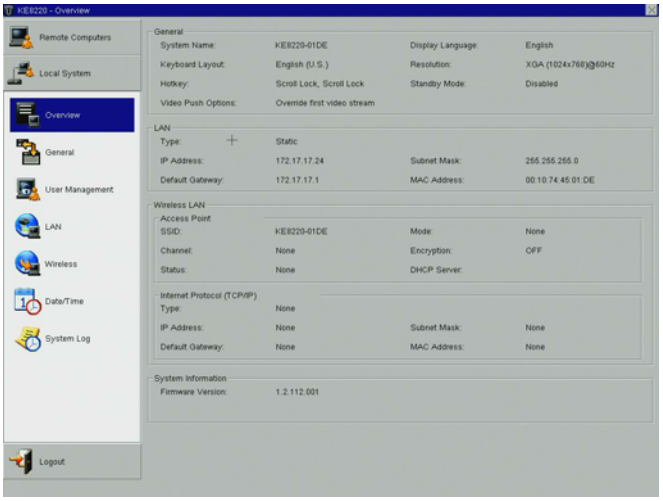
Information on connecting the 14.01.3370 to remote computers can be found in Chapter 5, **Remote Computer Operation**.

Viewing 14.01.3370 Settings

You can view a summary of the 14.01.3370 settings, as well as the current firmware version.

To view a summary of the 14.01.3370 settings:

From the **Local System** menu, select **Overview**. The *Overview* dialog box appears.

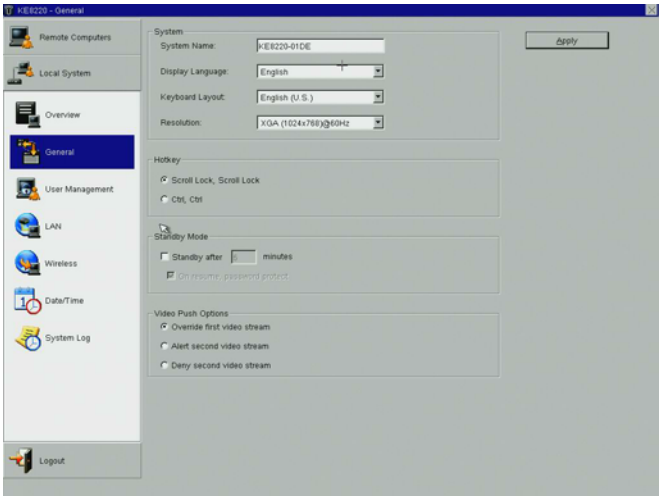


Configuring Local System Settings

14.01.3370 system settings are configured from the *General* dialog box.

To open the General dialog box:

From the **Local System** menu, select **General**. The *General* dialog box appears.



Setting the System Name

The 14.01.3370 uses the system name to identify itself to remote computers.

To set the system name for the 14.01.3370:

1. From the **Local System** menu, select **General**. The *General* dialog box appears.
2. Under **System**, type a system name for the 14.01.3370. System names can be up to 20 characters long.
3. Click **Apply**.

Setting the Display Language

Choose from among the following languages to display text in the 14.01.3370 graphical OSD: English, German, Japanese, or Traditional Chinese,. The default display language is English.

To set the display language:

1. From the **Local System** menu, select **General**. The *General* dialog box appears.
2. In the **Display Language** drop-down list, select the language that you wish to use to display text in the 14.01.3370 graphical OSD.
3. Click **Apply**.
4. In the dialog box that appears, click **Yes** if you want the new display language to take effect immediately.

Setting the Keyboard Layout

The 14.01.3370 recognizes the following keyboard layouts: English (U.K.), English (U.S.), French, German, Italian, Japanese, Korean, Spanish, and Thai. Choose the layout of the keyboard that was connected during installation. The default keyboard layout is English (U.S.).

Note: The 14.01.3370 recognizes only ASCII characters. Language characters other than English will not display correctly.

To set the keyboard layout:

1. From the **Local System** menu, select **General**. The ***General*** dialog box appears.
2. In the **Keyboard Layout** drop-down list, select the layout of the keyboard that you connected to the 14.01.3370 during installation.
3. Click **Apply**.

Setting the Resolution

You can set the output resolution to be optimized for a display device connected to the 14.01.3370.

To set the resolution:

1. From the **Local System** menu, select **General**. The ***General*** dialog box appears.
2. In the **Resolution** drop-down list, select the resolution that best suits the display device connected to the 14.01.3370. Select from:
   - XGA (1024 x 768) @ 60 Hz (default)
   - XGA (1024 x 768) @ 75 Hz
   - WXGA (1280 x 768) @ 60 Hz
   - WXGA (1280 x 768) @ 75 Hz
   - SXGA (1280 x 1024) @ 60 Hz.
3. Click **Apply**.
4. In the dialog box that appears, click **Yes** if you want the new display resolution to take effect immediately.

Setting the Hotkey

You can use the hotkey to switch between the graphical OSD and the VNC console. The default hotkey is **[Scroll Lock, Scroll Lock]**.

To set the hotkey:

1. From the **Local System** menu, select **General**. The *General* dialog box appears.
2. Under **Hotkey**, select either **Scroll Lock**, **Scroll Lock** or **Ctrl**, **Ctrl**.
3. Click **Apply**.

Setting Standby Mode

You can enable standby mode, which will turn off video to the display device if the user is idle for too long. You also can choose to password protect the 14.01.3370 upon resuming from standby mode. When the 14.01.3370 is in standby mode, the *Power* LED on the front panel of the 14.01.3370 illuminates (red). The 14.01.3370 automatically exits standby mode when there is mouse or keyboard input.

To enable standby mode:

1. From the **Local System** menu, select **General**. The *General* dialog box appears.
2. Select **Standby after** and enter the number of minutes after which the 14.01.3370 should standby if there is no input from the user.
3. Select **On resume**, **password protect** to require the user to enter a password when resuming after standby mode.
4. Click **Apply**.

To disable standby mode:

1. From the **Local System** menu, select **General**. The *General* dialog box appears.
2. Click to clear the **Standby after** check box.
3. Click **Apply**.

Setting the Video Push Options

You can set how the 14.01.3370 responds when a second computer uses KE8220VNC to push video to the 14.01.3370 while another computer is already pushing video to the 14.01.3370. Available options are:

- **Override first video stream** – the second video stream pushed to the 14.01.3370 overrides the first. This is the default option.
- **Alert second video stream** – an alert displays on the monitor connected to the 14.01.3370 when pushing a second video stream; you can switch to or cancel the second video stream.
- **Deny second video stream** – denies access of a second video stream to the 14.01.3370.

To set the Video Push option:

1. From the **Local System** menu, select **General**. The *General* dialog box appears.
2. Under **Video Push Options**, select one of the options listed above.

User Management

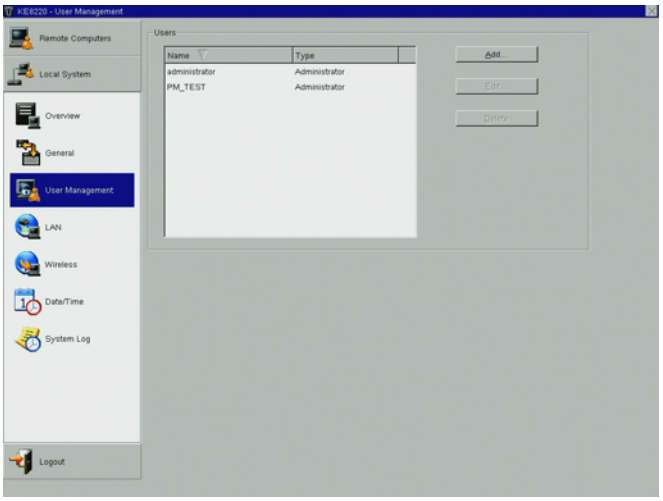
Administrators can add up to 64 users to the 14.01.3370. The 14.01.3370 stores the username and password for each user. Administrators can also edit user settings or delete a user. Once users have been added, they can use their usernames and passwords to login to the 14.01.3370.

When adding and editing users, administrators can choose whether users have administrative privileges. Administrators can configure settings for the 14.01.3370, manage user accounts, and upgrade the 14.01.3370 firmware.

You can add, edit, and delete users from the *User Management* dialog box.

To open the *User Management* dialog box:

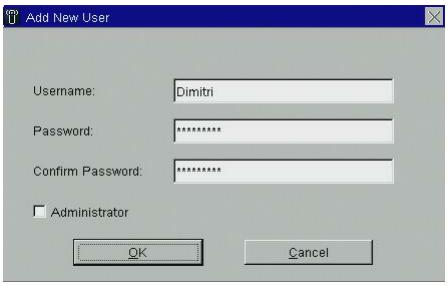
From the **Local System** menu, select **User Management**. The *User Management* dialog box appears.



Adding a User

To add a user:

1. From the **Local System** menu, select **User Management**. The *User Management* dialog box appears.
2. Under **Users**, click **Add**. The *Add New User* dialog box appears.

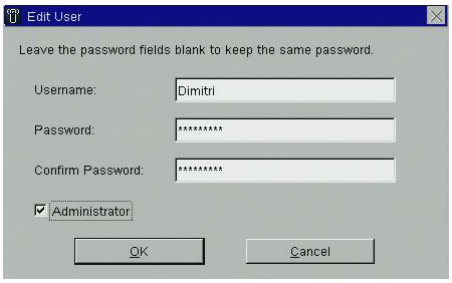


3. Type a name for the user. Usernames can be from 6 to 16 characters long. Legal characters include: a–z, A–Z, 0–9, space, hyphen, and underscore. Usernames are case sensitive.
4. Type a password for the user. Passwords can be from 8 to 16 characters long. Passwords are case sensitive.
5. Confirm that the password was typed correctly by typing it again.
6. Select whether the user is an administrator.
7. Click **OK** to finish adding the user, or click **Cancel** to cancel the operation.

Editing a User

To edit a user:

1. From the **Local System** menu, select **User Management**. The *User Management* dialog box appears.
2. Under **Users**, click to select a user, and then click **Edit** (or double-click on a user). The *Edit User* dialog box appears.



3. Edit the user settings that you wish to change. Leave the password fields blank to keep the same password.
4. Click **OK** to save your changes, or click **Cancel** to cancel the operation.

Deleting a User

To delete a user account:

1. From the **Local System** menu, select **User Management**. The *User Management* dialog box appears.
2. Under **Users**, click to select the user that you wish to delete.
3. Click **Delete**. The *Confirm User Delete* dialog box appears.
4. Click **Yes** to delete the user, or click **No** to cancel the operation.

Configuring Network Settings

The 14.01.3370 uses standard TCP/IP protocol to communicate with computers. You can attach the 14.01.3370 to your Ethernet network via the LAN port, or install the Wireless-G USB Adapter to connect to a wireless LAN. You can choose to configure the 14.01.3370's TCP/IP properties manually, or dynamically assign them using Dynamic Host Configuration Protocol (DHCP).

Configuring a Router, Gateway, or Firewall

You may need to open the following ports in your router, gateway, or firewall[1]. This will ensure that the 14.01.3370 can communicate properly with remote computers that have KE8220VNC installed.

TCP ports: 1352, 1353, and 6998 (depends on remote computer setting)

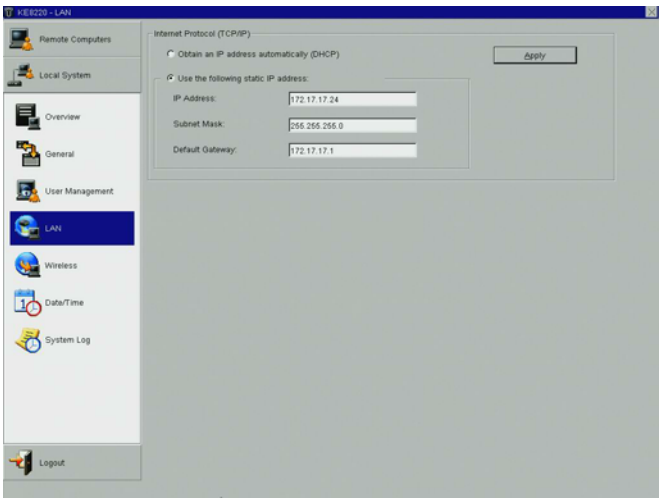
UDP ports: 1352

1. Windows Vista users must open these ports in the Windows Firewall.

Configuring Ethernet Settings

To configure the TCP/IP settings for the Ethernet connection:

1. From the **Local System** menu, select **LAN**. The *LAN* dialog box appears.



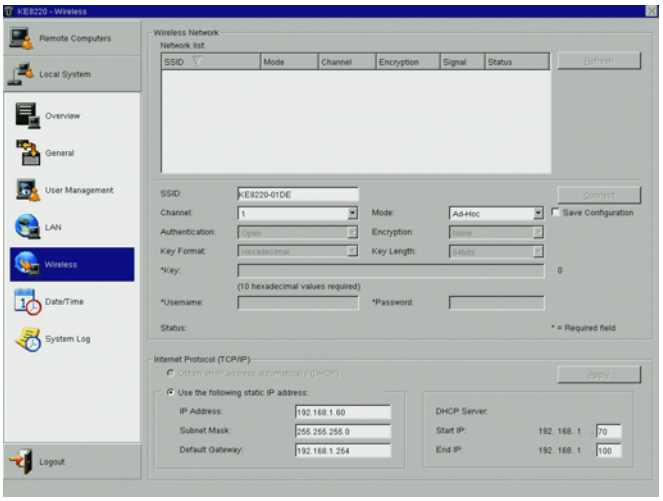
2. Under **Internet Protocol (TCP/IP)**, choose **Obtain an IP address automatically (DHCP)**. Or, choose **Use the following static IP address**, and then manually enter the IP address, subnet mask, and default gateway. If you are unsure, ask your network administrator for the correct settings.
3. Click **Apply**.

Configuring Wireless Network Settings

You can find wireless devices and connect to a wireless network. Wireless network settings are configured from the *Wireless* dialog box.[1]

To open the Wireless dialog box:

From the **Local System** menu, select **Wireless**. The *Wireless* dialog box appears.



After you install the Wireless-G USB Adapter, the 14.01.3370 searches for access points (AP) and other wireless devices. It displays information about the wireless devices it discovers in the *Network list.* Select a device from the *Network list* to display detailed information about it in the fields below. You can update the list at any time by clicking **Refresh**.

If a wireless device does not broadcast its Service Set Identifier (SSID), it will not appear in the Network list. However, you can still associate with such devices by manually configuring their settings.

1. The 14.01.3370 stores the settings of the currently connected wireless network only. If you connect to a new wireless network, the previous wireless network settings will be over-written by the new wireless network settings. The settings must be re-entered each time you re-connect to a wireless network.

The table below describes the *Wireless Network* settings:

Item	Description
SSID	Service Set Identifier – displays the unique name associated with the wireless LAN. The SSID is identical for each device or station on the wireless LAN.
Mode	Displays the operating mode of the wireless network: **Infrastructure:** The 14.01.3370 communicates with other wireless devices and the wired network through an access point (AP). **Ad-Hoc:** The 14.01.3370 communicates directly with other wireless devices without the use of an AP.
Channel	Displays the channel used for data transmission.
Authentication	Displays the authentication options in Infrastructure Mode. Options are Open, Shared, WPA, WPA2, WPA-PSK, and WPA2-PSK.
Encryption	Displays whether the wireless device requires WEP, AES or TKIP or no encryption.
Signal	Displays the strength of the signal from the AP or wireless device.
Status	Displays the status of the 14.01.3370's connection to the wireless network: **Connected:** The 14.01.3370 is associated with an AP or wireless device. **Disconnected:** The 14.01.3370 is not associated with an AP or wireless device.
Refresh	Clicking **Refresh** updates the Network list.
Connect	Clicking **Connect** tries to associate the 14.01.3370 with the AP or wireless device that you selected or manually configured. When switching to another AP, the key of new AP should be input.
Save Configuration	If selected, the AP's settings are permanently saved. If the 14.01.3370 is powered off, it will automatically try to associate with the same AP when it is powered on again.
Key Format	Allows you to select the key format: **Hexadecimal:** The key consists of alphanumeric characters 0–9 and A–F. **ASCII:** The key consists of 7-bit ASCII characters.
Key Length	Allows you to select the key length: **64 bit**, **128 bit**, or **256 bit**.

Ad-Hoc Mode

In *Ad-Hoc* mode, computers connect directly to the 14.01.3370 without needing an access point. In this case, the 14.01.3370 acts as a server which computers connect to. Because of this, the 14.01.3370 IP address cannot be obtained dynamically using DHCP; instead, the 14.01.3370 IP address must be set manually.

With DHCP server mode automatically activated in Ad-Hoc mode, the start and end IP address range, as specified in the *DHCP Server* section of *Internet Protocol (TCP/IP)*, can be set.[1] This range represents the maximum number of IP addresses that can be automatically assigned to computers connecting to the 14.01.3370.

Configuring TCP/IP Settings in Ad-Hoc Mode

To configure the TCP/IP settings for the wireless network in Ad-Hoc mode:

1. From the **Local System** menu, select **Wireless**. The *Wireless* dialog box appears.
2. Under **Internet Protocol (TCP/IP)**, manually enter the IP address, subnet mask, default gateway, start IP, and end IP. If you are unsure, ask your network administrator for the correct settings, or simply leave the default settings.

Configuring the 14.01.3370 as a Server in Ad-Hoc Mode

To configure the 14.01.3370 as a server in Ad-Hoc mode:

1. Make sure the Wireless-G USB Adapter is attached to the 14.01.3370.
2. From the **Local System** menu, select **Wireless**. The *Wireless* dialog box appears.
3. In the fields provided under **Wireless Network**, enter the settings for the 14.01.3370:
   a) Type the SSID for the 14.01.3370.
   b) Select **Ad-Hoc** as the wireless networking mode.
   c) Enter the channel.
4. If you want to use these settings permanently, select **Save Configuration**.
5. Click **Connect**. The status displays the **SSID Name - Connected**.
6. Use your computer's list of wireless network connections to connect to the 14.01.3370.

1. The first three parts of the IP address are configured in the *IP Address* text box; only the last part of the IP address can be set for the start and end of the range.

Infrastructure Mode

In *Infrastructure* mode, computers connect to the 14.01.3370 using an access point (AP). The AP may also be connected to a cabled network and the Internet which can be used by the 14.01.3370 to connect to local and remote computers. In this case, the 14.01.3370 does not acts as a server (the *DHCP Server* section of *Internet Protocol (TCP/IP)* is disabled), but is simply another node on the network which computers can connect to. Because of this, the 14.01.3370 IP address can be obtained dynamically using DHCP, or set manually.

Configuring TCP/IP Settings in Infrastructure Mode

To configure the TCP/IP settings for the wireless network in Infrastructure mode:

1. From the **Local System** menu, select **Wireless**. The *Wireless* dialog box appears.
2. Under **Internet Protocol (TCP/IP)**, choose **Obtain an IP address automatically (DHCP)**. Or, choose **Use the following static IP address**, and then manually enter the IP address, subnet mask, and default gateway. If you are unsure, ask your network administrator for the correct settings.
3. Click **Apply**.

Connecting to APs or Wireless Devices in Infrastructure Mode

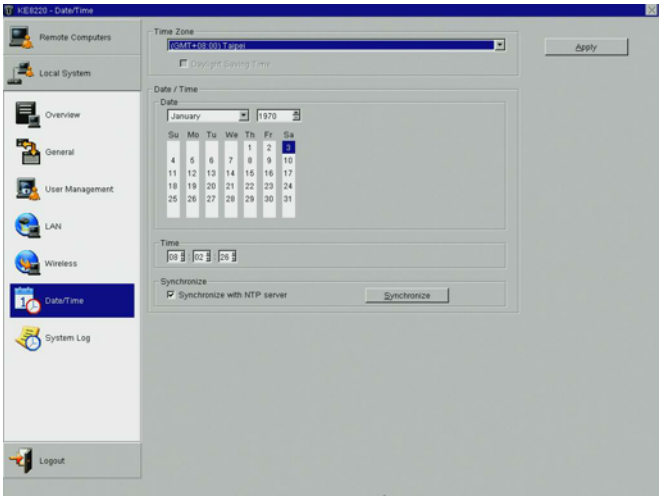
To associate with an access point (AP) or other wireless device:

1. From the **Network list**, select the AP or wireless device with which you wish to associate. If you want to use the default settings provided by the AP, skip to Step 3. If you want to change the default settings, or the AP, or the wireless device you wish to associate with does not appear in the list, go to Step 2.
2. In the fields provided, enter the settings for the AP or wireless device:
   a) Type the SSID for your wireless network.
   b) Select **Infrastructure** as the wireless networking mode.
   c) Enter the channel.
3. If the AP or wireless device requires authentication, select from Open, Shared, WPA, WPA2, WPA-PSK, and WPA2-PSK.
4. If the AP or wireless device requires WEP, AES, or TKIP encryption, enable it.
5. Select the encryption key length and format.
6. In the field provided, enter the key. (The key format and number of characters required are displayed under the field. The number of characters already entered is displayed to the right of the field.)
7. If you want to use these settings permanently, select **Save Configuration**.
8. Click **Connect**. The 14.01.3370 will try to associate with the AP or wireless device. If the 14.01.3370 is successful, the status will change to **Connected**.

Date/Time

The Date/Time dialog box lets the Administrator set up the 14.01.3370's time parameters.

To view the Date/Time dialog box, from the **Local System** menu, select **Date/Time**. The *Date/Time* dialog box appears.

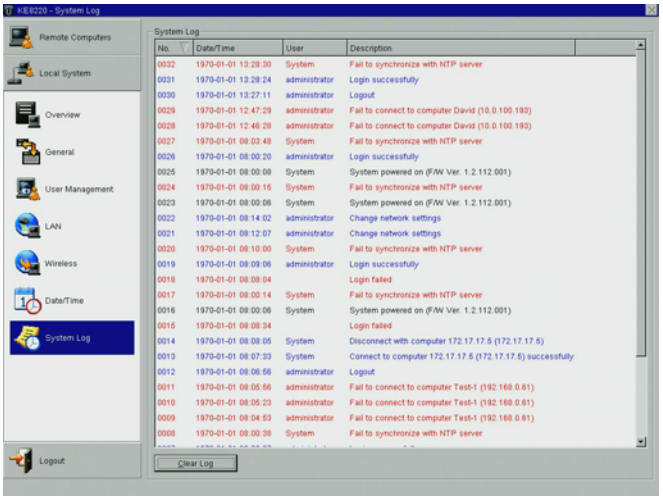


- To establish the time zone that the 14.01.3370 is located in, drop down the Time Zone list and choose the city that most closely corresponds to where it is.
- Check the box to enable Daylight Saving Time.
- To set the date and time, use the drop down menus for month and year, click on the date in the calendar graphic.
- To set the time, use the 24 hour HH:MM:SS format.
- Check the box to synchronize with NTP server.
- Click **Apply** to save your changes.

System Log

The 14.01.3370 supports a System Log that tracks a maximum of 512 events. When the limit is reached, the oldest events get discarded as the new events come in. The System Log can only be viewed by Administrators.

To view the System Log, from the **Local System** menu, select **System Log**. The *System Log* dialog box appears.



Records in the System Log are color-coded according to the following table:

Color	Definition
Black	Records shown in black are system messages.
Blue	Records shown in blue are login/logout records and connection information.
Red	Records shown in red are errors or failed attempts.

- Administrators can clear the System Log from in the local OSD. To clear the System Log, from the **Local System** menu, select **System Log**, then click **Clear Log**.

Downloading the System Log

The System Log can be downloaded using the KE8220VNC software. See *Downloading the System Log*, page 52 for further details.

Logging Out

When you are finished using the 14.01.3370, click **Logout** to exit.

Chapter 4
KE8220VNC

Overview

KE8220VNC is a program that runs on Windows-based remote computers. It enables up to 127 14.01.3370 at a time to connect to a remote computer and control it.[1] Additionally, a remote computer running KE8220VNC can push video to a 14.01.3370.

KE8220VNC captures video from the remote computer and sends it to the 14.01.3370, while keyboard and mouse input from the 14.01.3370 is captured and sent to the remote computer.

Two versions of KE8220VNC are shipped with the 14.01.3370. One version is built into the 14.01.3370 and is available as an executable download file from the 14.01.3370. This version of KE8220VNC is not a full installation package and is used for creating temporary connections to the 14.01.3370 – meeting room presentations are ideal for downloading the KE8220VNC executable file.

Another version of the KE8220VNC software is available from the installation CD provided with the 14.01.3370. This version of KE8220VNC can be configured to run as a service or an application and is ideal for computers that need to be monitored remotely and accessed anytime using the 14.01.3370, even after the computer has been shutdown and restarted.

1. Performance depends upon the remote computer's hardware configuration and the network's load capacity. When more than one 14.01.3370 users connect to a remote computer, they share the keyboard and mouse.

Downloading the KE8220VNC Executable

If you do not know the IP address of the 14.01.3370, use the following steps to download the KE8220VNC executable file:

1. Connect a monitor/display device to the 14.01.3370 (connecting a keyboard and mouse is optional), connect the 14.01.3370 to a LAN or insert the wireless LAN adapter into the 14.01.3370, and then connect the power adapter to the 14.01.3370 to power it on.
2. Log in to the OSD (see page 16) and change the IP address to one that is appropriate for the network that the 14.01.3370 resides on.
   See *Configuring Network Settings*, page 27, for more details.
3. Ensure that your computer is connected to a LAN/WAN and enter the IP address into your computer's web browser to access the 14.01.3370 webpage and download a copy of the KE8220VNC executable file.
4. Save the file to any location on your computer.
5. Double-click the saved file to start KE8220VNC.

If you know the IP address of the 14.01.3370, use the following steps to download the KE8220VNC executable file:

1. Connect the 14.01.3370 to a LAN or insert the wireless LAN adapter into the 14.01.3370 and connect the power adapter to the 14.01.3370 to power it on.
2. Ensure that your computer is connected to a LAN/WAN and enter the IP address into your computer's web browser to access the 14.01.3370 webpage and download a copy of the KE8220VNC executable file.
3. Save the file to any location on your computer.
4. Double-click the saved KE8220VNC executable file to start KE8220VNC.

When you are finished using the KE8220VNC executable file, simply delete it to completely remove KE8220VNC from your computer.

To configure KE8220VNC, see page 48 for details.

Installing KE8220VNC on Remote Computers

Install KE8220VNC on remote computers that you want to access from the 14.01.3370. KE8220VNC comes with an unlimited license, so you can install it on as many remote computers as necessary.

During installation, choose whether to install KE8220VNC as a *service* or an *application*. If you install KE8220VNC as a service, it starts when Windows is booted and continues to run in the background. It is a good idea to install KE8220VNC as a service if the remote computer must be accessible whenever the operating system is running. Also, when you install KE8220VNC as a service, 14.01.3370 users can use the *Ctrl-Alt-Delete* command on the remote computer.

If you choose to install KE8220VNC as an application, you will need to manually start it each time and 14.01.3370 users will not be able to use the *Ctrl-Alt-Delete* command on the remote computer. You should install KE8220VNC as an application if you will use it only occasionally, such as on a laptop computer to push video to the 14.01.3370.

During installation, you will be asked to choose the language that KE8220VNC will use to display user interface text once the installation is complete. If you wish to change the display language, you must reinstall KE8220VNC.

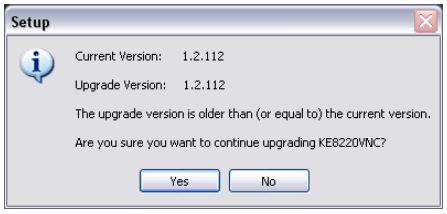
You may need to open certain ports in your router, gateway, or firewall to ensure that KE8220VNC can communicate properly with the 14.01.3370. To see which ports are used, see *Configuring a Router, Gateway, or Firewall*, page 27[1].

Note: Installing KE8220VNC as a service may not be supported for some Windows operating systems.

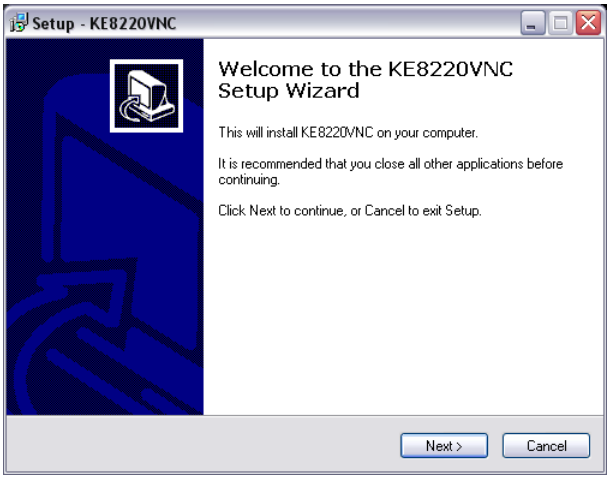
1. Windows Vista users must open these ports in the Windows Firewall.

To install KE8220VNC on a remote computer:

1. Insert the 14.01.3370 installation CD into the CD drive of the computer you want to install KE8220VNC and wait a few seconds for the installation program to autostart.[1]
2. If you previously installed KE8220VNC and are not installing a newer version, the following dialog box appears requiring your confirmation:

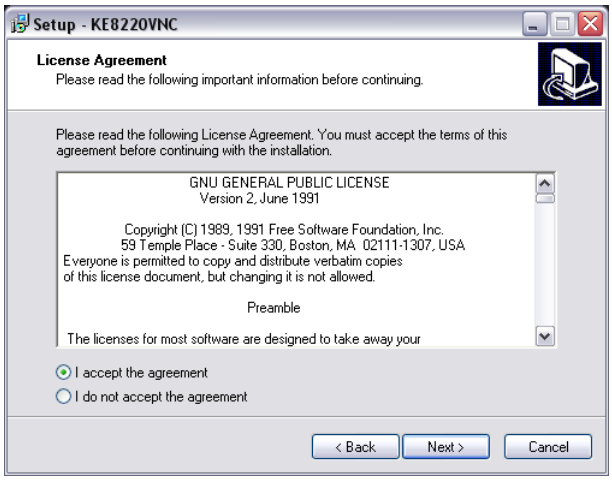

Setup
Current Version: 1.2.112
Upgrade Version: 1.2.112
The upgrade version is older than (or equal to) the current version.
Are you sure you want to continue upgrading KE8220VNC?
Yes
No

3. Click **Yes** to continue. Or, click **No** to cancel. If you clicked Yes, the Setup KE8220VNC dialog box appears.

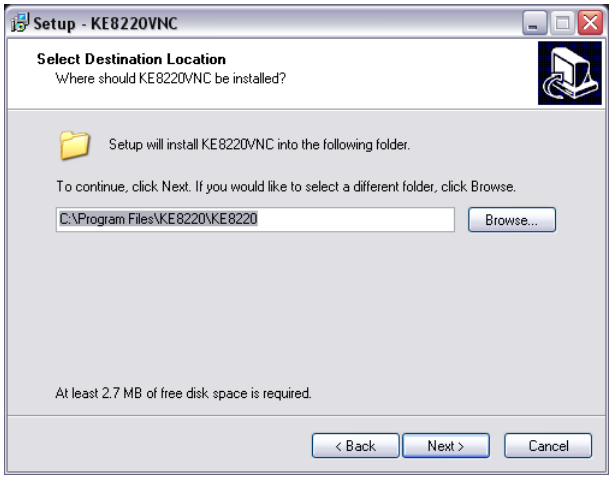

Setup - KE8220VNC
Welcome to the KE8220VNC Setup Wizard
This will install KE8220VNC on your computer.
It is recommended that you close all other applications before continuing.
Click Next to continue, or Cancel to exit Setup.
Next >
Cancel

1. If the installation program fails to start, use your computer's file browser to navigate to the CD drive and double-click the KE8220VNC.exe installation file.

4. Click **Next**. The following dialog box appears:


Setup - KE8220VNC
License Agreement
Please read the following important information before continuing.
Please read the following License Agreement. You must accept the terms of this agreement before continuing with the installation.
GNU GENERAL PUBLIC LICENSE
Version 2, June 1991
Copyright (C) 1989, 1991 Free Software Foundation, Inc.
59 Temple Place - Suite 330, Boston, MA 02111-1307, USA
Everyone is permitted to copy and distribute verbatim copies
of this license document, but changing it is not allowed.
Preamble
The licenses for most software are designed to take away your
I accept the agreement
I do not accept the agreement
< Back
Next >
Cancel

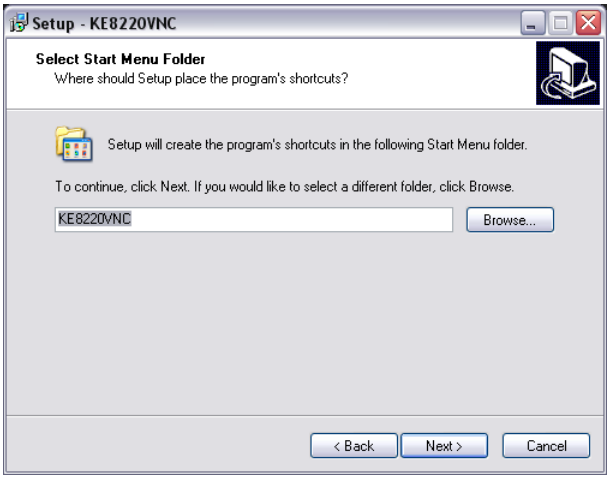
5. Read and accept the license agreement, and then click **Next**. The following dialog box appears:


Setup - KE8220VNC
Select Destination Location
Where should KE8220VNC be installed?
Setup will install KE8220VNC into the following folder.
To continue, click Next. If you would like to select a different folder, click Browse.
C:\Program Files\KE8220\KE8220
Browse...
At least 2.7 MB of free disk space is required.
< Back
Next >
Cancel

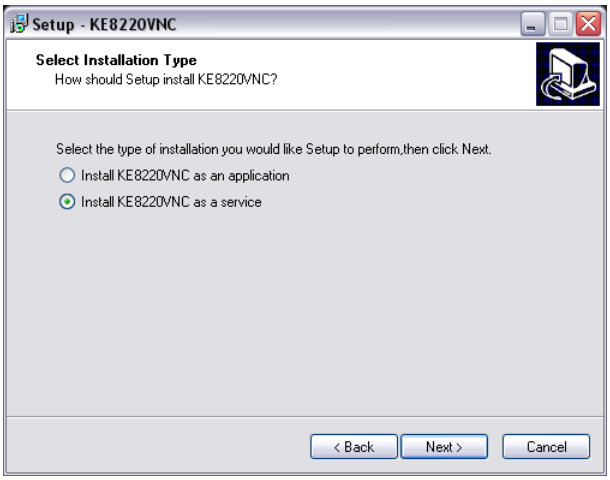
(Continues on next page.)

(Continued from previous page.)

6. Select the installation folder, and then click **Next**.
   The following dialog box appears:


Setup - KE8220VNC
Select Start Menu Folder
Where should Setup place the program's shortcuts?
Setup will create the program's shortcuts in the following Start Menu folder.
To continue, click Next. If you would like to select a different folder, click Browse.
KE8220VNC
Browse...
< Back
Next >
Cancel

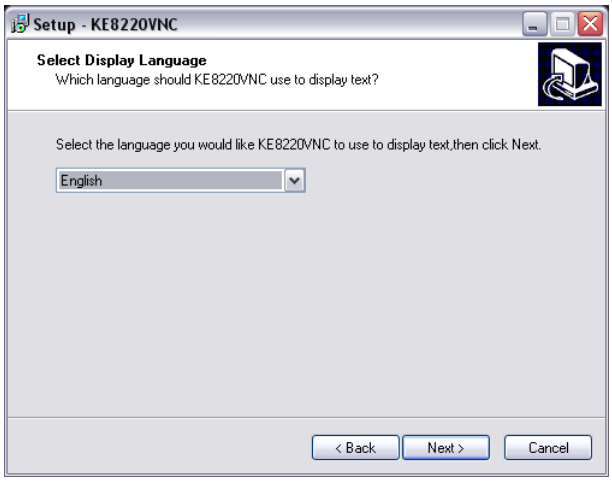
7. Select the Start Menu folder in which you wish the program's shortcut created, and then click **Next**. The following dialog box appears:


Setup - KE8220VNC
Select Installation Type
How should Setup install KE8220VNC?
Select the type of installation you would like Setup to perform,then click Next.
Install KE8220VNC as an application
Install KE8220VNC as a service
< Back
Next >
Cancel

8. Select the type of installation, and then click **Next**.

Note: Installing KE8220VNC as a service may not be supported for some Windows operating systems. If it is not supported for your system, this option will be unavailable.

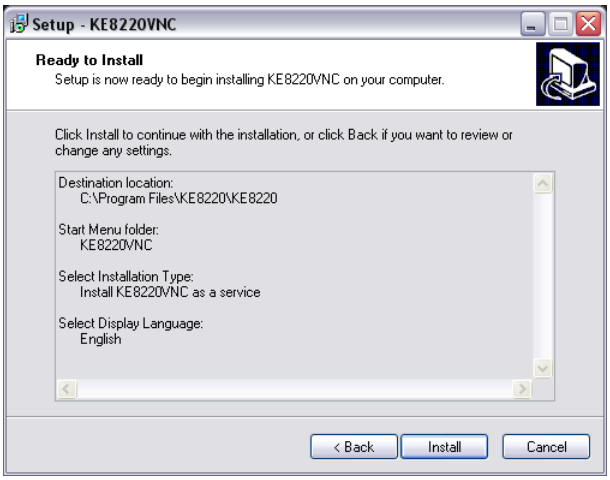
The following dialog box appears:


Setup - KE8220VNC
Select Display Language
Which language should KE8220VNC use to display text?
Select the language you would like KE8220VNC to use to display text,then click Next.
English
< Back
Next >
Cancel

(Continues on next page.)

(Continued from previous page.)

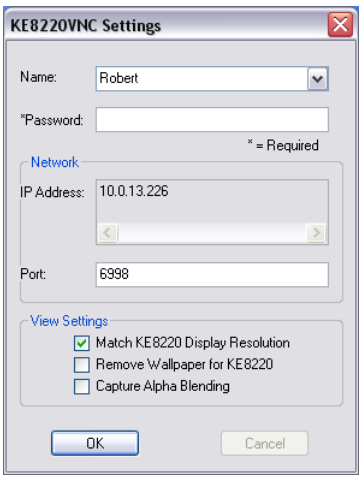
9. Select whether to add an KE8220VNC shortcut icon on the Desktop and click **Next**. The following dialog box appears:


Setup - KE8220VNC
Ready to Install
Setup is now ready to begin installing KE8220VNC on your computer.
Click Install to continue with the installation, or click Back if you want to review or change any settings.
Destination location:
C:\Program Files\KE8220\KE8220
Start Menu folder:
KE8220VNC
Select Installation Type:
Install KE8220VNC as a service
Select Display Language:
English
< Back
Install
Cancel

10. Click **Install**. After KE8220VNC installs on your computer, the following dialog box appears:

Setup - KE8220VNC
Completing the KE8220VNC Setup Wizard
Setup has finished installing KE8220VNC on your computer. The application may be launched by selecting the installed icons.
Click Finish to exit Setup.
Start KE8220VNC
Finish

11. Click **Finish** to exit Setup. If you selected **Start KE8220VNC**, the KE8220VNC Settings dialog box appears.



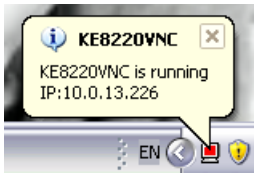
Note: By default, the computer's name is displayed in the *Name* field. You can change the name by selecting the field and typing in a new name. The 14.01.3370 uses this name, and the computer's IP address, to identify the computer on a network. See *Configuring KE8220VNC Settings*, page 48.

12. Type in a password and click **OK**. The KE8220VNC installation is complete.

Starting KE8220VNC

If you installed KE8220VNC as an application, do the following to start it:

From the **Start** menu, select **Programs > KE8220VNC > KE8220VNC**. The KE8220VNC icon will appear in the notification area of the taskbar indicating that it is running and displaying your computer's IP address.



If you installed KE8220VNC as a service, do the following to start it:

Restart the computer. After the computer restarts, KE8220VNC will run as a service. The KE8220VNC icon will appear in the notification area of the taskbar.

Closing KE8220VNC

To close KE8220VNC, click the KE8220VNC icon in the notification area of the taskbar, and select **Exit**.

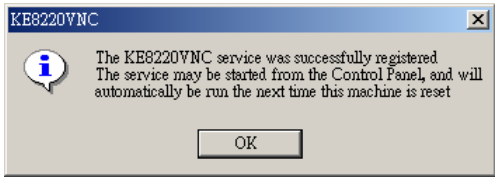
If you installed KE8220VNC as a service, the next time you reboot the computer the KE8220VNC service will also start. To completely remove the service and prevent KE8220VNC from starting the next time Windows is booted, see *Removing the KE8220VNC Service*, page 47.

Installing the KE8220VNC Service

Installing KE8220VNC as a service may not be supported for all versions of Windows. If you are unable to install KE8220VNC as a service, please check our Website to see if a newer version of KE8220VNC supports this feature for your version of Windows.

To install the KE8220VNC service:

1. From the **Start** menu, select **Programs > KE8220VNC > KE8220VNC (Service Mode) > Install KE8220VNC Service**. The following dialog box appears.

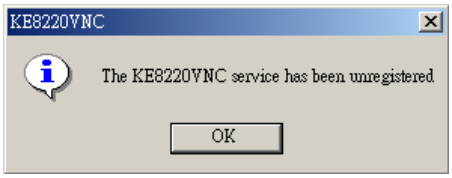

KE8220VNC
The KE8220VNC service was successfully registered
The service may be started from the Control Panel, and will automatically be run the next time this machine is reset
OK

2. Click **OK**.
3. Restart the computer. After the computer restarts, KE8220VNC will run as a service. The KE8220VNC icon will appear in the notification area of the taskbar.

Removing the KE8220VNC Service

To remove the KE8220VNC service:

1. From the **Start** menu, select **Programs > KE8220VNC > KE8220VNC (Service Mode) > Remove KE8220VNC Service**. The following dialog box appears.



2. Click **OK**. The KE8220VNC service is removed.

Configuring KE8220VNC

If KE8220VNC was installed properly and is running, the KE8220VNC icon will appear in the notification area of the taskbar.

Icon	Description
	A red screen indicates that KE8220VNC is running.
	A blue screen indicates that KE8220VNC is running and at least one 14.01.3370 is connected.

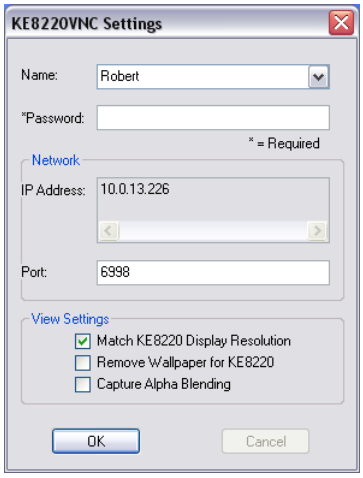
Configuring KE8220VNC Settings

Before using KE8220VNC the first time you must configure the settings.[1]

Note: You can only use ASCII characters to type text in KE8220VNC.

To configure the KE8220VNC settings:

1. Click the KE8220VNC icon in the notification area of the taskbar. A pop-up menu appears.
2. From the pop-up menu, select **Settings**. The KE8220VNC Settings dialog box appears.



1. Configuration of KE8220VNC installation and executable versions is the same.

3. Enter a name for the remote computer. Remote computer names can be up to 16 characters long. By default, the computer's name is displayed. You can change the name by selecting the field and typing in a new name. The 14.01.3370 uses this name, and the computer's IP address, to identify the computer on a network.
4. Type a password for the remote computer. Passwords can be up to 8 characters long. Users must enter this password when connecting to the remote computer from the 14.01.3370.
5. Under **Network**, type the port that KE8220VNC will use to communicate with the 14.01.3370. If you don't have any reason to change this, use the default port setting (6998).
6. Under **View Settings**:
   - Select **Match 14.01.3370 Display Resolution** if you wish KE8220VNC to resize the remote computer's display resolution to match that of the 14.01.3370 when they are connected. After the connection is ended, the remote computer's display resolution will revert to the original setting. Matching the display resolutions enables 14.01.3370 users to view the remote computer's entire desktop environment in Full Screen mode without scroll bars.
   - Select **Remove Wallpaper for 14.01.3370** to remove the remote computer's wallpaper from the 14.01.3370's display. Removing wallpaper improves performance by reducing the amount of processing power and network bandwidth required to transmit the remote computer's display to the 14.01.3370.
   - Select **Capture Alpha Blending** to display the remote computer's alpha blending on the 14.01.3370's display.

   Note: Enable *Capture Alpha Blending* to improve the display of computers running Windows Vista.

7. Click **OK** to save your changes. Or, click **Cancel** to close the dialog box without saving changes.

Pushing Video to the 14.01.3370

You can *push video* to a 14.01.3370 from a remote computer running KE8220VNC. When you push video, KE8220VNC initiates a connection to the 14.01.3370 to display the remote computer's desktop environment on the display device connected to the 14.01.3370.

Connections to 14.01.3370 start from the Push Video to 14.01.3370 dialog box.

To open the Push Video to 14.01.3370 dialog box:

1. Double-click the KE8220VNC icon in the notification area of the taskbar. The **Push Video to 14.01.3370** dialog box appears.

The **Push Video to 14.01.3370** dialog box lists all 14.01.3370 that have been discovered automatically. If the 14.01.3370 that you wish to connect to is not listed, you can still connect to it by entering the IP address.

The dialog box also indicates the status of each 14.01.3370:

Status	Description
Ready	The 14.01.3370 is ready to accept connections from remote computers.
Busy	The 14.01.3370 is in use, but you may still try to connect. See *Setting the Video Push Options*, page 23 for details.

To push video from the remote computer to a 14.01.3370:

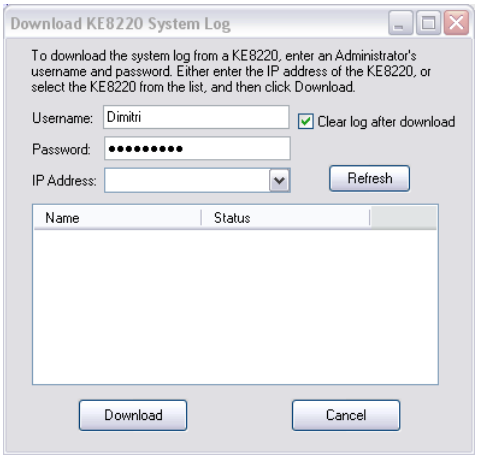
1. Double-click the KE8220VNC icon in the notification area of the taskbar. The **Push Video to 14.01.3370** dialog box appears.
2. Enter the 14.01.3370's IP address, or select the 14.01.3370 from the list.
3. Click **Connect**. Depending on the Video Push option selected in the graphical OSD (see *Setting the Video Push Options*, page 23), a dialog box may appear on the 14.01.3370 user's screen requesting that the user accept or refuse the connection. If the 14.01.3370 user does not respond within 10 seconds, the attempt to connect is aborted. If the connection is successful, the color of the KE8220VNC icon will change to blue and the remote computer's desktop environment will appear on the 14.01.3370 display device. Or, click **Cancel** to close the dialog box without connecting to the 14.01.3370.
4. Click **Disconnect** to close the connection to the 14.01.3370.

Downloading the System Log

The 14.01.3370 supports a system log that records up to 512 records. To view the System Log, see *System Log*, page 35.

The System Log can be downloaded in CSV format using KE8220VNC. To download the System Log:

1. Right-click the KE8220VNC icon in the notification area of the taskbar and select *Download KE8220 System Log*. The **Download System Log** dialog box appears.


Download KE8220 System Log
To download the system log from a KE8220, enter an Administrator's username and password. Either enter the IP address of the KE8220, or select the KE8220 from the list, and then click Download.
Username:
Dimitri
Clear log after download
Password:
IP Address:
Refresh
Name
Status
Download
Cancel

2. Enter an administrator's name and password, and enter the 14.01.3370's IP address or select it from the list. Click **Download**.

Note: Select the checkbox to clear the log after download.

Uninstalling KE8220VNC

To uninstall KE8220VNC:

1. From the **Start** menu, select **Programs** > **KE8220VNC** > **Uninstall KE8220VNC**.
2. Click **Yes** and **OK** when prompted. KE8220VNC service is removed.

Chapter 5
Remote Computer Operation

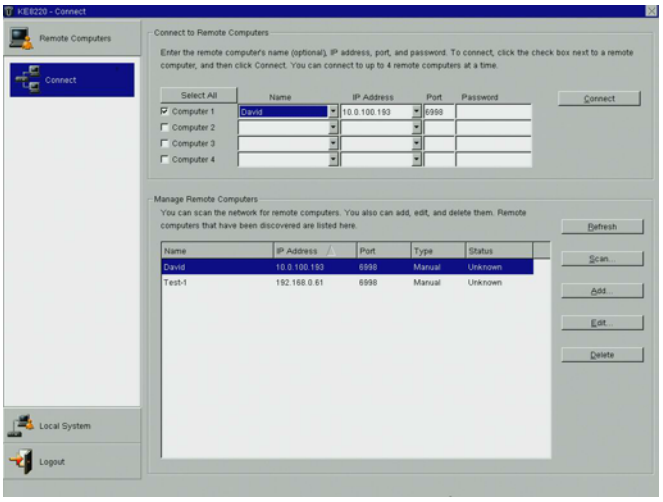
Remote Computer Connection

Connecting to Remote Computers

You can connect up to 4 remote computers at one time to the 14.01.3370 through a LAN, WLAN, or the Internet. KE8220VNC must be properly configured and running on remote computers that you wish to connect to. You will need the IP address, port, and password that were entered when KE8220VNC was configured on the remote computer. (To configure KE8220VNC on remote computers, see *Installing KE8220VNC on Remote Computers*, page 39, for details.) All connections to remote computers start from the *Connect* dialog box.

To open the *Connect* dialog box:

Select the **Remote Computers** menu. The *Connect* dialog box appears.



The *Connect* dialog box is divided into two areas:

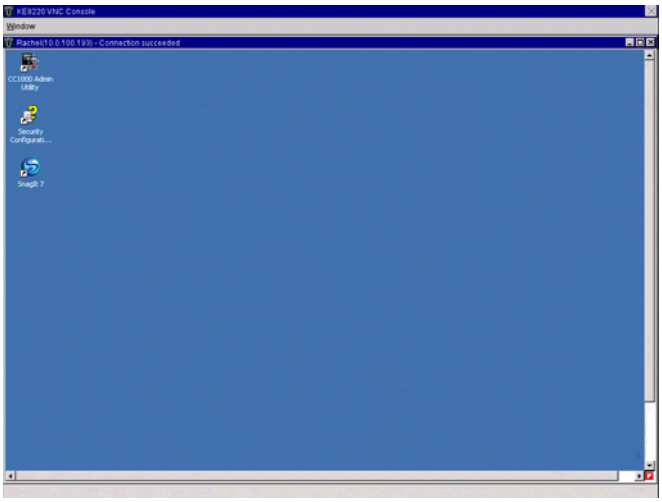
- Connections to remote computers are initiated in the *Connect to Remote Computers* area.
- The *Manage Remote Computers* area stores remote computers that have been added to the 14.01.3370 automatically, manually, or through scanning the network. It also provides information about the status of the remote computers and how they were added. The table below describes the remote computer information.

Column	Description
Name	Displays the name of the remote computer (if one has been given).
IP Address	Displays the IP address of the remote computer.
Port	Displays the port that the 14.01.3370 uses to communicate with the remote computer.
Type	*Auto*: Remote computers that are running KE8220VNC and lie within the same subnet as the 14.01.3370 are automatically discovered and added. *Scan*: Remote computers that were discovered through scanning the network. *Manual*: Remote computers that were manually added.
Status	Displays the current status of the remote computer: ◆ *Ready:* The remote computer is ready to accept connections. ◆ *Busy:* At least one other user is connected to the remote computer. If you connect now, you will share the connection with the other user(s). ◆ *Unknown:* The 14.01.3370 cannot determine the status of the remote computer.

To connect to one or more remote computers:

1. Select the **Remote Computers** menu. The *Connect* dialog box appears.
2. Under **Connect to Remote Computers**, enter a remote computer's IP address, port, and password on a single line. (If the remote computer that you wish to connect to has already been added to the 14.01.3370, select it from either the **Name** or **IP Address** drop-down lists. The port is entered automatically.)
3. Repeat this procedure for each remote computer that you wish to connect to. You can connect to up to 4 remote computers at a time.

4. Click the check box next to each remote computer that you wish to connect to. Or, choose **Select All** to connect to all 4 remote computers at once.
5. Click **Connect.** The 14.01.3370 VNC Console appears.



Disconnecting Remote Computers

You can manually disconnect all remote computers at the same time by clicking the **X** in the upper right corner of the VNC Console. (This feature is not available in Full Screen mode.) Or, follow the procedure below to manually disconnect remote computers one at a time.

Note: Remote computers are automatically disconnected when you logout and when you replace them with new connections to remote computers in the *Connect* dialog box.

To manually disconnect a remote computer:

1. Click the red triangle at the bottom right corner of the window for the remote computer that you want to disconnect. A pop-up menu appears.
2. From the pop-up menu, select **Disconnect**. The remote computer is disconnected.

Remote Computer Display and Control

The VNC Console

The VNC Console displays the remote computers and allows you to control them. Each remote computer appears in a separate window within the VNC Console. (If you cannot see the remote computer's full display, use the scroll bars to scroll up and down and side to side until you can see the relevant portion of the screen.)

Switching Between the Graphical OSD and VNC Console

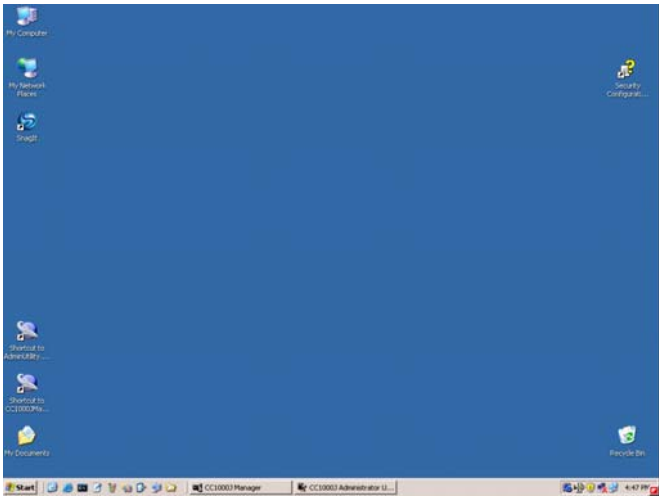
You can use the hotkey to switch between the VNC Console and the graphical OSD, and back again. The connection to the remote computer will not be affected by switching between the graphical OSD and the VNC console.

To switch between the VNC Console and graphical OSD:

1. Press the selected hotkey twice within 1 second. The display will switch between the VNC Console and graphical OSD.
2. Press the hotkey twice again to switch back to the previous screen.

Full Screen mode

Full Screen mode is the default display mode when connecting to 1 remote computer. In this mode, you can control the remote computer just as if you were sitting right in front of it. In addition, window borders are removed and the remote computer is displayed at the maximum resolution possible.



You also can change the display mode to Picture-in-Picture mode (for 2 remote computers); or, you can cascade or tile the windows. If you wish to change the display mode, you must first disable Full Screen mode (see below).

There are two ways to enable Full Screen mode. You can double-click on the window that you want to make full screen. Or, follow the procedure described below.

To enable Full Screen mode:

1. If Picture-in-Picture (PiP) mode is enabled, disable it.
2. Click the red triangle at the bottom right corner of the window for which you wish to enable Full Screen mode. A pop-up menu appears.
3. From the pop-up menu, select **Full Screen**. Full Screen mode is enabled.

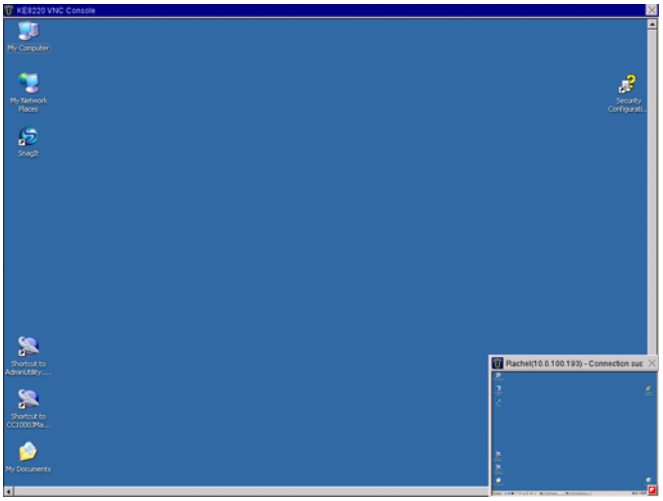
To disable Full Screen mode:

1. Click the red triangle at the bottom right corner of the window. A pop-up menu appears.
2. From the pop-up menu, select **Full Screen**. Full Screen mode is disabled and the remote computer windows are tiled.

To switch to PiP mode, see *Picture-in-Picture (PiP) Mode* below.

To cascade or tile remote computer windows, see *Panel Array mode*, page 59.

Picture-in-Picture (PiP) Mode



Picture-in-Picture (PiP) mode is the default display mode when connecting to 2 remote computers. PiP mode lets you to control a remote computer while monitoring another. In PiP mode, one remote computer displays in a full-size window, while the other remote computer displays in a smaller window at the bottom right corner of the screen. The full-size window is the active window. To swap the windows in which the remote computers appear, double-click on the smaller window.

You also can change the display mode to Full Screen mode; or, you can cascade or tile the windows. If you wish to change the display mode, you must first disable PiP mode (see below).

To enable PiP mode:

1. If Full Screen mode is enabled, disable it.
2. Click the red triangle at the bottom right corner of the window that you want to make smaller. A pop-up menu appears.
3. From the pop-up menu, select PIP. PiP mode is enabled.

Note: You can enable PiP mode only when connected to 2 remote computers.

To disable PiP mode:

1. Click the red triangle at the bottom right corner of the window. A pop-up menu appears.

2. From the pop-up menu, click to clear PIP. PiP mode is disabled and the remote computer windows are tiled.

To switch to Full Screen mode, see *Full Screen mode*, page 56.

To cascade or tile remote computer windows, *Panel Array mode*, below.

Panel Array mode

When you connect to 3 or 4 remote computers at a time, or you disable Full Screen mode or Picture-in-Picture (PiP) mode, the remote computer windows are tiled by default. To control a remote computer, you first must enable Full Screen mode for that window (see page 56).

You also can enable Picture-in-Picture mode when connected to 2 remote computers.

Note: 1. You cannot cascade or tile a window if you are connected to only 1 remote computer.

2. You can use the shortcut combination **[Alt+W]** to open the Window menu.

To tile remote computers:

From the Window menu, select **Tile**. The remote computer displays are tiled.

To cascade remote computers:

From the Window menu, select **Cascade**. The remote computer displays are cascaded.

To horizontally tile remote computers:

From the Window menu, select **Tile Horizontally**. The remote computer displays are tiled horizontally.

To enable Full Screen mode, see *Full Screen mode*, page 56.

To enable PiP mode, see *Picture-in-Picture (PiP) Mode*, page 58.

Ctrl-Alt-Delete

You can use the shortcut key combination **[Ctrl-Alt-Delete]** on remote computers for which you have installed the KE8220VNC service.
See *Installing the KE8220VNC Service*, page 47.

Remote Computer Management

You can add up to 256 remote computers to the 14.01.3370. The 14.01.3370 stores the name, IP address, and port for each remote computer. At any time, you also can edit or delete remote computers. Once remote computers have been added, you only need choose them from a list and type the password to connect to them.

Remote computers that are running KE8220VNC and lie within the same subnet as the 14.01.3370 are automatically discovered and added to the 14.01.3370. Remote computers that are added in this way cannot be edited or deleted.

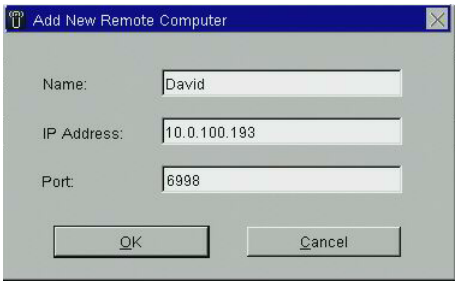
When manually adding or editing remote computers, verify that the IP address and port entered are the same in the 14.01.3370 and KE8220VNC. Otherwise, the 14.01.3370 will not be able to connect to the remote computer.

Adding Remote Computers

You can add remote computers manually or by scanning the network for remote computers running KE8220VNC. Up to 256 remote computers can be added in this way.

To manually add a remote computer:

1. Select the **Remote Computers** menu. The *Connect* dialog box appears.
2. Under **Manage Remote Computers**, click **Add**. The *Add New Remote Computer* dialog box appears.



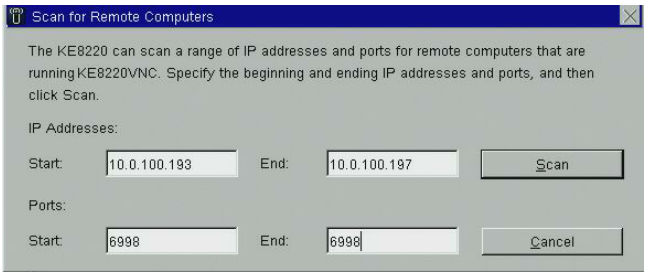
3. Type a name for the remote computer. Remote computer names can be up to 16 characters long.
4. Type the IP address of the remote computer and the port that the 14.01.3370 will use to communicate with KE8220VNC. If you are not

sure which are the correct IP address and port, check the KE8220VNC settings on the remote computer.

5. Click **OK** to save your changes. Or, click **Cancel** to close the dialog box without saving changes.

To scan the network for remote computers:

1. Select the **Remote Computers** menu. The *Connect* dialog box appears.
2. Under **Manage Remote Computers**, click **Scan**. The *Scan for Remote Computers* dialog box appears.



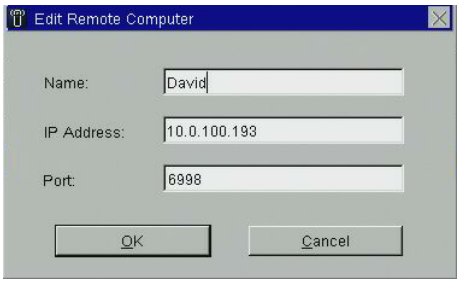
3. Under **IP Addresses**, type the beginning and ending IP addresses for the range that you wish to search.
4. Under **Ports**, type the beginning and ending ports for the range that you wish to search.
5. Click **Scan** to begin scanning the network for remote computers running KE8220VNC. When the 14.01.3370 finishes scanning, it will inform you how many remote computers were found and add them to the Manage Remote Computers list. Or, click **Cancel** to close the dialog box without scanning the network.

Editing Remote Computers

You can edit the name, IP address, and port of remote computers that have been added manually or by scanning the network. Automatically discovered remote computers cannot be edited.

To edit a remote computer:

1. Select the **Remote Computers** menu. The *Connect* dialog box appears.
2. Under **Manage Remote Computers**, click to select a remote computer, and then click **Edit**. Alternatively, you can double-click on a remote computer. The *Edit Remote Computer* dialog box appears.



3. Edit the remote computer settings that you wish to change.
4. Click **OK** to save your changes. Or, click **Cancel** to close the dialog box without saving changes.

Deleting Remote Computers

You can delete remote computers that have been added manually or by scanning the network. Automatically discovered remote computers cannot be deleted.

To delete a remote computer:

1. Select the **Remote Computers** menu. The *Connect* dialog box appears.
2. Under **Manage Remote Computers**, click to select the remote computer that you wish to delete.
3. Click **Delete**. The *Confirm Remote Computer Delete* dialog box appears.
4. Click **Yes** to finish deleting the remote computer. Or, click **No** to cancel the operation.

Appendix

Safety Instructions

General

- Read all of these instructions. Save them for future reference.
- Follow all warnings and instructions marked on the device.
- Do not place the device on any unstable surface (cart, stand, table, etc.). If the device falls, serious damage will result.
- Do not use the device near water.
- Do not place the device near, or over, radiators or heat registers.
- The device cabinet is provided with slots and openings to allow for adequate ventilation. To ensure reliable operation, and to protect against overheating, these openings must never be blocked or covered.
- The device should never be placed on a soft surface (bed, sofa, rug, etc.) as this will block its ventilation openings. Likewise, the device should not be placed in a built in enclosure unless adequate ventilation has been provided.
- Never spill liquid of any kind on the device.
- Unplug the device from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
- The device should be operated from the type of power source indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
- The device is designed for IT power distribution systems with 230V phase-to-phase voltage.
- To prevent damage to your installation it is important that all devices are properly grounded.
- The device is equipped with a 3-wire grounding type plug. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not attempt to defeat the purpose of the grounding-type plug. Always follow your local/national wiring codes.
- Do not allow anything to rest on the power cord or cables. Route the power cord and cables so that they cannot be stepped on or tripped over.

(Continues on next page.)

(Continued from previous page.)

- If an extension cord is used with this device make sure that the total of the ampere ratings of all products used on this cord does not exceed the extension cord ampere rating. Make sure that the total of all products plugged into the wall outlet does not exceed 15 amperes.
- To help protect your system from sudden, transient increases and decreases in electrical power, use a surge suppressor, line conditioner, or uninterruptible power supply (UPS).
- Position system cables and power cables carefully; Be sure that nothing rests on any cables.
- Never push objects of any kind into or through cabinet slots. They may touch dangerous voltage points or short out parts resulting in a risk of fire or electrical shock.
- Do not attempt to service the device yourself. Refer all servicing to qualified service personnel.
- If the following conditions occur, unplug the device from the wall outlet and bring it to qualified service personnel for repair.
  - The power cord or plug has become damaged or frayed.
  - Liquid has been spilled into the device.
  - The device has been exposed to rain or water.
  - The device has been dropped, or the cabinet has been damaged.
  - The device exhibits a distinct change in performance, indicating a need for service.
  - The device does not operate normally when the operating instructions are followed.
- Only adjust those controls that are covered in the operating instructions. Improper adjustment of other controls may result in damage that will require extensive work by a qualified technician to repair.

Rack Mounting

- Before working on the rack, make sure that the stabilizers are secured to the rack, extended to the floor, and that the full weight of the rack rests on the floor. Install front and side stabilizers on a single rack or front stabilizers for joined multiple racks before working on the rack.
- Always load the rack from the bottom up, and load the heaviest item in the rack first.
- Make sure that the rack is level and stable before extending a device from the rack.
- Use caution when pressing the device rail release latches and sliding a device into or out of a rack; the slide rails can pinch your fingers.
- After a device is inserted into the rack, carefully extend the rail into a locking position, and then slide the device into the rack.
- Do not overload the AC supply branch circuit that provides power to the rack. The total rack load should not exceed 80 percent of the branch circuit rating.
- Make sure that all equipment used on the rack – including power strips and other electrical connectors – is properly grounded.
- Ensure that proper airflow is provided to devices in the rack.
- Ensure that the operating ambient temperature of the rack environment does not exceed the maximum ambient temperature specified for the equipment by the manufacturer
- Do not step on or stand on any device when servicing other devices in a rack.

Specifications

14.01.3370

Function			14.01.3370
Connectors	Console Ports	Keyboard	1 x USB Type A Female (White)
		Video	1 x HDB-15 Female (Blue)
		Mouse	1 x USB Type A Female (White)
	Power		1 x DC Jack
	LAN		1 x RJ-45 Female
	WLAN		1 x USB Type A Female (White)
Switches	Reset		1 x Semi-recessed Pushbutton
LEDs	WLAN		1 (Orange/Green)
	10/100 Mbps		1 (Orange/Green)
	Link		1 (Green)
	Power		1 (Green/Orange)
Video			1280 x 1024 @ 60 Hz
Power Consumption			DC 5.3V, 3.8W
Environment	Operating Temp.		0–50° C
	Storage Temp.		-20–60° C
	Humidity		0–80% RH, Non-condensing
Physical Properties	Housing		Metal
	Weight		0.50 kg
	L x W x H		20.00 x 8.00 x 2.50 cm

Wireless-G USB Adapter

Function		Specification
USB Connector		1 x USB Type A Male (White)
Wireless LAN LED	Detecting	1 (Orange)
	Connected	1 (Blue)
Power Consumption		USB Bus Powered

Factory Default Settings

14.01.3370

Setting	Default
Default username and password	Username: administrator Password: password
System Name	14.01.3370 + MAC address (For example: 14.01.3370001122334455)
Display Language	English
Keyboard Layout	English (U.S.)
Resolution	XGA (1024 x 768) @ 60 Hz
Hotkey	[Scroll Lock] [Scroll Lock]
Standby Mode	Disabled
Video Push Option	Override first video stream
LAN	IP Address: 192.168.0.60 Subnet Mask: 255.255.255.0 Default Gateway: 192.168.0.254 MAC Address: 00:10:74:45:00:F8
Wireless Network	SSID: KE8220-01DE Authentication: Auto Channel: 1 Mode: Ad-Hoc Encryption: None Key Format; Hexadecimal Key Length: 64 bits IP Address: 192.168.1.60 Subnet Mask: 255.255.255.0 Default Gateway: 192.168.1.254 DHCP Start IP: 192.168.1.70 DHCP End IP: 192.168.1.100

KE8220VNC

Setting	Default
Communication port	6998

Resetting the 14.01.3370

Press the RESET button for at least 3 seconds, then release to reset the 14.01.3370.

Restoring Factory Default Settings

You can restore the 14.01.3370 settings back to their factory defaults. All local system settings will be reset, and all remote computers that have been scanned or manually added will be erased. Any users that were added will also be removed.

To restore the 14.01.3370's factory default settings:

1. Disconnect the power adapter cable from the 14.01.3370.
2. While pressing the RESET button, reconnect the power adapter cable to the 14.01.3370.
3. Release the RESET button.

After logging in, a message displays indicating that the factory default settings have been restored.

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